ABSTRACT OF THE DISCLOSURE

A parallel stream operation apparatus in which selecting keys for encrypting or decrypting stream data input in parallel is simplified. A plurality of paths that correspond respectively to a plurality of keys for encrypting and/or decrypting stream data are provided. Stream data received by a first interface is decrypted with a first decryption key, and stream data received by a second interface is decrypted with a second decryption key. An input stream processing unit outputs the stream data received by the first input unit to a first path corresponding to the first decryption key, and outputs the stream data received by the second input unit to a second path corresponding to the second decryption key. An operation unit decrypts the stream data from the first path with the first decryption key and the stream data from the second path with the second decryption key.